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(54) METHOD FOR FORMING THIN FILM

(57) Abstract:

PURPOSE: To selectively grow a thin film on the surface of substrate of other material by putting the substrate having the surface composed of at least two kinds of materials is in a vacuum container and introducing a reaction gas containing a molecule having a low attachment coefficient to one material of at least the two kinds of materials housed in the vacuum container.

CONSTITUTION: Pressure in a vacuumn container charged with a reaction gas is set in a pressure range (d>L) to make an average free path (d) of molecules of reaction gas longer than the shortest distance (L) between a substrate in the vacuum container and an exposure wall at the vacuum side of the vacuum container. Feed of the reaction gas is stopped until the total amount of the reaction gas fed to the vacuum container reaches an amount to generate a thin film on the surface of a material having a lower attachment coefficient to the reaction gas. In other words, the feed is stopped until the total amount of the reaction gas to collide thereto reaches an amount to generate a thin film on the surface of the material having a

lower attachment coefficient.

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